

1 1. (Once Amended) A nonvolatile memory system comprising:

2 nonvolatile memory for storing sector information, said nonvolatile memory being
3 organized into blocks, each block including a plurality of sectors, each sector identified by
4 a logical block address and for storing sector information; and

5 A controller coupled to said nonvolatile memory responsive to a host for writing
6 sector information to said nonvolatile memory and responsive to the host for updating
7 said sector information,

8 Wherein upon updating sector information, the controller writes to the next free or
9 available sector(s) of a block such that upon multiple re-writes or updating of sector
10 information, one or more blocks are substantially filled with sector information and upon
11 such time, the controller rearranges the updated sector information in sequential order
12 based on their respective logical block addresses thereby increasing system performance.

1 6.(Once Amended) A method of storing sector information in nonvolatile memory organized
2 into blocks, each block including a plurality of sectors, each sector identified by a logical
3 block address comprising:

4 receiving sector information for storage into a block of the nonvolatile memory;

5 storing the received sector information into one or more blocks;

6 receiving updated sector information for storage into a block of the nonvolatile memory;

7 storing the received updated sector information into the next free or available sector(s) of
8 a block such that upon multiple re-writes or updating of sector information, one or more
9 blocks are substantially filled with sector information; and

10 if needed, moving the updated sector information in sequential order based on their
11 respective logical block addresses.

Please add the following claims:

1 7.(Once Amended) A method of storing sector information in nonvolatile memory organized
2 into blocks, each block including a plurality of sectors, each sector identified by a logical
3 block address comprising:

4 receiving sector information for storage into a block of the nonvolatile memory;

5 storing the received sector information into one or more blocks;

6 receiving updated sector information for storage into a block of the nonvolatile memory;

7 storing the received updated sector information into the next free or available sector(s) of
8 a block such that upon multiple re-writes or updating of sector information, one or more
9 blocks are substantially filled with sector information; and

10 avoiding moving the updated sector information if the updated sector information belong
11 to sectors of a predetermined order and the logical block addresses of the sectors of the
12 updated sector information correspond to valid physical block addresses used to identify
13 sectors within the nonvolatile memory.

1 8. A method of storing sector information as recited in claim 7 wherein the avoiding step
2 further includes updating the correspondence between logic block addresses and physical
3 block addresses based upon the updated sector information.

1 9. A method of storing sector information as recited in claim 8 further including the step of
2 erasing the block that includes sector information which is superceded by the updated sector
3 information.

10.(Once Amended) A method of storing sector information in nonvolatile memory
organized into blocks, each block including a plurality of sectors, each sector identified by a
logical block address comprising:

receiving sector information for storage into a block of the nonvolatile memory;

storing the received sector information into one or more blocks;

receiving updated sector information for storage into a block of the nonvolatile memory;

storing the received updated sector information into the next free or available sector(s) of a block such that upon multiple re-writes or updating of sector information, one or more blocks are substantially filled with sector information; and

if needed, moving the updated sector information into sectors identified within the nonvolatile memory by virtual physical block addresses corresponding to respective virtual logical block addresses and avoiding moving the updated sector information if the updated sector information belong to sectors of a predetermined order and the virtual logical block addresses associated with sectors of the updated sector information correspond to valid virtual physical block addresses.